

FRAMATOME ANPProcedure and means for replacing and procedure for  
repairing a section of a pipe in the primary circuit of a  
nuclear reactorABSTRACT OF THE TECHNICAL CONTENTS OF THE INVENTION

Marking of the cuts which have to be made, cutting of the section at two ends, removal of the section which has to be replaced, bevelling of the joint ends of the parts remaining after the section has been cut out from the pipe; adjustment of a new or replacement section for length and bevelling of its joining ends and positioning and narrow bevel welding of the ends joining the replacement section to the ends of the remaining parts of the pipe are performed outside the pipe. Within the pipe operations of machining and inspecting an internal part of the joining ends welded together are performed by remote control in a programmed way by introducing and positioning means for working within the pipe from a component of the primary circuit. The procedure is in particular used to effect the replacement of a section of a cold leg of the primary circuit using means for carrying out work comprising a robot arm secured to a supporting chassis borne by a carriage which moves the means for carrying out work within the cold leg inserted into the cold leg through the volute of the primary pump of the nuclear reactor.

Figure 2.